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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,634	07/21/2003	Patrick Carl Wiley	I0780096 TWB/cd	4571
7590 01/10/2007 Oyen Wiggs Green & Mutala The Station-Suite 480 601 West Cordova Street Vancouver, BC V6B 1G1 CANADA			EXAMINER SELLMAN, CACHET I	
			ART UNIT	PAPER NUMBER
			1762	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/622,634

Applicant(s)

WILEY, PATRICK CARL

Examiner

Cachet I. Sellman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-12, 18-20, 23-27 and 31-35 is/are rejected.
- 7) ☒ Claim(s) 6-8, 13-17, 21, 22 and 28-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/26/2004, 8/17/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 12/3/2002. It is noted, however, that applicant has not filed a certified copy of the PCT/CA02/01864 application as required by 35 U.S.C. 119(b).

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

- Reference number "21" of Figure 1 is not defined in the specification.
- Reference number "31" of Figure 3 is not defined in the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective

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action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number "24" is mentioned in paragraph 0024 but it is not identified in Figures 1 and 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 23 recites the limitation "said template" in lines 3 and 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 9-12, 18-20, and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiley (US 7066680 B2).

Wiley teaches a process of applying a coating to a substrate which comprises the steps of forming a first pattern in the substrate (abstract); placing a pre-formed thermally settable sheet on the substrate (abstract and col. 2, lines 3-4); and heating the sheet in situ to a temperature sufficient for the sheet to adhere to the substrate (col. 1, lines 65-67 and col. 4, lines 35-36) as required by **claim 1**. The sheet is formed of a thermoplastic material (col. 2, lines 3-4) as required by **claim 2**. The substrate is an asphalt surface (col. 1, lines 51-52) as required by **claim 3**. Wiley teaches that the first pattern is formed by heating the asphalt surface until the surface is pliable (col. 3, lines 32-34); placing a template on the asphalt surface (col. 3, lines 34-35); imprinting the template into the surface to form the first pattern (col. 3, lines 34-35); and removing the template from the asphalt surface (col. 3, lines 36-38) as required by **claim 9**. Wiley also teaches that the first pattern can be formed by forming an asphalt surface from pliable asphalt (col. 3, lines 28-29); placing the template on the asphalt surface (col. 3, lines 28-29); imprinting the template to form the first pattern and removing the template from surface (col. 3, lines 28-30 and 37-39) as required by **claim 10**. The sheet is

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formed in a second pattern matching the first pattern and is alignable therewith (col. 3, lines 47-49) as required by **claim 11**. The sheet is subdividable into a plurality of discrete sections (col. 4, lines 7-9) as required by **claim 12**. The sheet can have a continuous top surface (col. 3, line 24) as required by **claim 18**. The sheet has at least one opening formed within (col. 4, lines 7-10) as required by **claim 19**.

Wiley teaches a process of applying a thermally settable sheet to a substrate by placing a pre-formed thermally settable sheet on a substrate where the sheet has a first surface in contact with the substrate and a second surface not in contact; heating the sheet in situ to a temperature sufficient for the sheet to adhere to the substrate and imprinting the sheet and substrate to form a first pattern (col. 3, lines 16-36 and col. 4, lines 1-2) as required by **claim 20**. The sheet is formed from thermoplastic material as required by **claim 24**. The substrate is an asphalt surface as required by **claim 25**.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley (US 7066680 B2) as applied to claims 1 and 3 above and in further view of Wiley (US 5653552).

The teachings of Wiley as applied to claims 1 and 3 are as stated above.

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Wiley does not teach heating the sheet by gradually increasing the temperature to enable the first surface of the sheet to bond with asphalt surface as required by **claim 5**.

Wiley ('552) teaches a process for heating by moving a heater over a surface in a successive forward and backward direction (abstract) which allows for the asphalt to be heated uniformly and efficiently with minimal or no overheating (col. 6, lines 15-33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Wiley 9'680) to include the heating apparatus of Wiley ('552). One would have been motivated to do so because both disclose processes for heating asphalt surfaces and Wiley ('552) further teaches by gradually heating the asphalt through successive forward and backward motion of the heater over the surface, the surface is heated uniformly and efficiently with minimal or no overheating therefore one would have a reasonable expectation of success in heating the sheet and asphalt with minimal overheating.

10. Claims 26-27, and 31-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley (US 7066680 B2) as applied to claim 20, 24 and 25 above in view of Corbin Jr. et al. (US 4854771).

The teachings of Wiley as applied to claims 20, 24, and 25 are as stated above.

Wiley does not teach that the sheet has a thickness between 30-150 mil or 50-125 mil as required by **claims 26 and 27** respectively.

Corbin Jr. et al. teaches a method for installing preformed pavement marking on an asphalt surface where the marking is a preformed thermoplastic sheet having a conventional thickness of 0.025-0.125 inches (25-125 mil). The thermoplastic marking are used to define traffic control information (abstract, col. 1, lines 7-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Wiley to include the thermoplastic sheet having the thickness of Corbin Jr et al. One would have been motivated to do so because both disclose processes for applying a thermoplastic material to asphalt surface in order to decorate roadways. Wiley is silent on the thickness of the sheet and Corbin Jr. et al. teaches an operable thickness for the sheet therefore one would have a reasonable expectation of success in applying the thermoplastic sheet to the asphalt.

Wiley teaches a process for applying a thermoplastic coating to a substrate which comprises providing a pre-existing substrate having a first pattern therein by forming the first pattern using a template; placing a preformed thermoplastic sheet on the substrate; and heating the sheet in situ to a temperature sufficient to adhere the sheet to the substrate in a configuration conforming to the first pattern.

Wiley does not teach that the thermoplastic sheet has a thickness of 50-125 mil as required by **claims 31 and 32**.

Corbin Jr. et al. teaches a method for installing preformed pavement marking on an asphalt surface where the marking is a preformed thermoplastic sheet having a conventional thickness of 0.025-0.125 inches (25-125 mil). The thermoplastic marking are used to define traffic control information (abstract, col. 1, lines 7-18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Wiley to include the thermoplastic sheet having the thickness of Corbin Jr et al. One would have been motivated to do so because both disclose processes for applying a thermoplastic material to asphalt surface in order to decorate roadways. Wiley is silent on the thickness of the sheet and Corbin Jr. et al. teaches an operable thickness for the sheet therefore one would have a reasonable expectation of success in applying the thermoplastic sheet to the asphalt.

Wiley teaches that the pattern is forming by compressing a template into the substrate (abstract) as required by **claim 33**. The template is pressed into the substrate while the substrate is in a heated state and thereafter is allowed to cool (col. 3, lines 27-36) as required by **claim 34**. The coating is decorative (col. 3, lines 41-42) as required by **claim 35**.

11. Claims 1-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stonwell et al. (US 5215402) in view of Corbin Jr. et al. (US 4854771).

Stonwell et al. discloses a process and apparatus for imprinting a pattern in an asphalt surface where a grid-like template is compressed into an asphalt surface. The template is removed and the asphalt is allowed to harden, then a thin coating of colored

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concrete can be added to the surface of the patterned asphalt to enhance the brick and mortar effect (abstract).

Stonwell et al. does not teach using a preformed thermally settable sheet as required by **claim 1**.

Corbin Jr. et al. teaches a method of installing a preformed pavement marking material on a asphalt surface where the asphalt is softened so the at the preformed marking material can be pressed into the asphalt (abstract). Corbin Jr. et al. teaches that preformed thermoplastic marking materials are superior to painted marking material because they have a longer service life. The thermoplastic sheet is colored and between 0.025 – 0.125 inches thick (col. 1, lines 7-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Stonwell et al. to include the preformed marking material as taught by Corbin Jr. et al. One would have been motivated to do so because both disclose processes of marking asphalt surfaces and Corbin Jr. et al. teaches the use of preformed marking material over coating because of the longer service life therefore one would have a reasonable expectation of success in marking the asphalt surface with the marking having a longer service life.

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As stated above the sheet is formed of thermoplastic material as required by **claim 2**.

The surface is an asphalt surface as required by **claim 3**. The marking material has a thickness of about 25-125 mil as required by **claim 4**.

As taught by Stonwell et al., the pattern is formed by forming a hot and pliable asphalt surface; placing a template on the surface and imprinting the template to form a first pattern then the template is removed (abstract; col. 2, lines 60-66) since the asphalt is hot meaning it was heated to form into a pliable surface as required by **claims 9 and 10**.

Allowable Subject Matter

12. Claims 6-8, 13-17, 21-22 and 28-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding 6-8 and 28-29, the prior art does not teach nor suggest heating the sheet using an apparatus having a support frame extending over the sheet where the heater is mounted for movement in a path which periodically passes over the sheet. Regarding 13, the prior art does not teach applying more than one sheet and heating both sheets to conform to the first pattern. Regarding 21, the prior art does not teach placing template over the sheet, compressing then forming the template.

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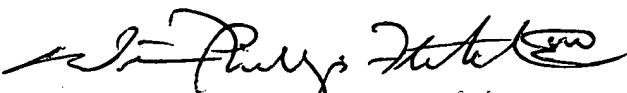
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman
Examiner
Art Unit 1762

cis


William Phillip Fletcher III
Primary Examiner
AU 1762